EXECUTIVE SUMMARY

On 26 May 2006, at 3:56 p.m. EDT, Mishap Aircraft (MA) an F-16D, S/N 84-1326, assigned to the 302nd Fighter Squadron, 944th Fighter Wing, Luke Air Force Base AZ, departed Key West Naval Air Station (NAS), FL, on an incentive sortie. At 4:08 p.m. the Mishap Pilot (MP) declared an emergency for a physiological event experienced by the Mishap Incentive Flyer (MIF). The flight terminated at Key West NAS at 4:10 p.m. The MP extricated the unconscious MIF with the assistance of NAS Crash Fire Rescue (CFR). NAS medical technicians performed prolonged resuscitation efforts. The MIF was transported by ambulance to a local civilian hospital for treatment. Subsequently, medical air transport conveyed the MIF to Miami's Mt Sinai Hospital. The MIF was pronounced dead on 28 May 2006 at 12:30 a.m.

The 302nd Fighter Squadron was deployed to NAS Key West as part of a two week PATRIOT TUNA exercise. The incident took place during a scheduled incentive flight for the MIF who occupied the F-16D's Rear Cockpit (RC). The MA had flown previously that day without incident. Approximately one minute into the flight, the MIF began hyperventilating. The MP advised the MIF to "Go Oxygen 100%". There were no intelligible responses from the MIF after the first three minutes of flight. The MP made multiple attempts to regain contact with the MIF and continued to provide instructions to "Gang load your oxygen regulator" and "Drop your mask". Post flight analysis and laboratory test confirmed the MA, life support and personal equipment functioned properly.

The Accident Investigation Board determined, by clear and convincing evidence that the mishap was caused by a lack of oxygen to the MIF during the climb-out when the MIF inadvertently stopped his oxygen flow to his mask regulator. Almost immediately after takeoff the MIF began to breathe rapidly causing the onset of hypoxia. Information in the MA Head UP Display (HUD) transcript reveals the MIF is uncomfortable with the amount of air he was getting. At some point the MIF attempts to "gang load" his oxygen regulator as he was taught in Life Support training. By gang loading his regulator he would have to move the emergency lever to the "EMER" position causing pressurized air to enter his mask, and he also move the diluter switch to "100%" which changes the oxygen flow to 100% oxygen vice a mixture of ambient air and oxygen. With a sense of urgency the MIF reached down and did the opposite of gang load to relieve the situation by turning the EMER switch to NORM and the diluter switch from 100% to NORM. In addition, the MIF inadvertently turned his regulator ON/OFF switch to the "OFF" position at the same time, preventing any oxygen or air mixture to move through the mask. Hypoxic, the MIF is unable to turn the regulator back on or drop his mask. The MP noted the three regulator switches immediately after landing in the NORM, NORM and OFF positions. There were three factors that significantly contributed to the mishap: 1) Communication difficulties between front and rear cockpits, 2) Hyperventilation leading to hypoxia, and 3) Regulator design and rear cockpit placement

Under 10 U.S.C. 2254(d) any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from the accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.